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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/552,715	04/19/2000	Seiji Umemoto	Q58947	3149
7590 07/14/2004 Shghrue Mion Zinn Macpeak & Seas PLLC 2100 Pennsylvania Avenue NW Washington, DC 20037			EXAMINER PARKER, KENNETH	
			ART UNIT 2871	PAPER NUMBER

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicant No.	Applicant(s)	
	09/552,715	UMEMOTO, SEIJI	
	Examiner	Art Unit	
	Kenneth A Parker	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12 and 17-22 is/are rejected.
- 7) ☒ Claim(s) 4 and 13-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 1-3, 5-12, 17-22 are rejected under 35 U.S.C. 103(a) as being obvious over DuNah et al 5420761 in view of Kalamanash 5532852.

DuNah et al does disclose an edge lit back light in figure 3 with an angle of 55-45 degrees at one of the surfaces and 1-15 degrees at the other, in a light pipe with an upper, lower and incident side surface, the lower is reflective, and output means are on the upper surface, and an LCD is on the upper surface including at least one polarizing plate. As the projections point substantially at 45 degrees, with almost the exact same ranges of the claimed variables, and directs light substantially downward to a diffusely reflective reflector directly attached, it clearly meets the means plus function limitations. The ratio of 8 to one or greater met by the indication of a depth of 1-10mm and a spacing of 100-250mm with an angle of 45-55 degrees, so all possible configurations meet 8 to one or greater. Almost all possible configurations meet the 10 degree slope (only a minimal portion of the possible configurations extends beyond 10 degrees- well over 90% of the range is below 1 degree- making the ranges almost exactly coextensive, and the judicial determination that overlapping ranges are at least obvious overwhelmingly applicable. The 45-55 is the same range as the 35-45, because they are referenced to different points (one is referenced to the normal, the other the surface). Even if it were not, the two would be viewed as an overlapping range to the claimed 35-45, but is seen as performing the same task (reflecting approximately 45 degrees, and obvious as it has been judicially determined that overlapping ranges are at least obvious, this difference is within the ordinary skill

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level. The width is 100-250 microns, which as an overlapping range is not patentably distinct for the same reasons that the 35-45 degree angle does not patentably distinguish (they are linked variables).

Lacking from the disclosure is the use of a polarizer, however a polarizer was part of the conventional LCD, and would have been obvious for that reason. Evidence that it was conventional is in the Patent and Trademark office classification definitions for class 349 search notes: "In this case, nominal cell structure refers to a broad recitation of substrates, electrodes (or conductive plates or electrical excitation means), alignment layers, a seal, spacers, and polarizers. ", and in Kalamash's description of the typical active matrix LCD

Having the transmissivity of greater than 90% would have been obvious as the transmissivity was one of the most well known things to have as close as possible to 100 as possible, and having the bumps be uniform was also a notoriously well known goal and obvious for that reason.

Silver and aluminum were the conventionally employed materials and would have been obvious for that reason.

Regarding claim 5, the pitch is fixed as the material is a solid.

Any assertion that something is well known is a taking of official notice Note: Any assertions that an element, practice or relationship was conventional has the incorporated motivations of the benefits of having established supply chains, well understood behavior and manufacturing methodologies.

Allowable Subject Matter

Claims 4 and 13-16 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

The Duhnah reference refers to the normal, not to the plane, so the references 45-55 is the same as applicant's 35-45.

Claims 5-7 are now rejected, as their dependency was changed and therefore they no longer include the limitations of claim 4, so in fact the examiner never noted allowability of the current claims 5-7.

The following assertions that items were conventional or well known have not been challenged and therefore are acquiesced to and taken the status of admitted prior art.

Lacking from the disclosure is the use of a polarizer, however a polarizer was part of the conventional LCD, and would have been obvious for that reason. Evidence that it was conventional is in the Patent and Trademark office classification definitions for class 349 search notes: "In this case, nominal cell structure refers to a broad recitation of substrates, electrodes (or conductive plates or electrical excitation means), alignment layers, a seal, spacers, and polarizers. ", and in Kalamash's description of the typical active matrix LCD

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Silver and aluminum were the conventionally employed materials and would have been obvious for that reason.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

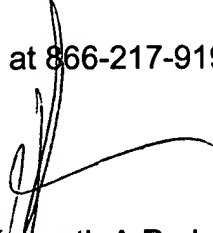
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Parker whose telephone number is 571-272-2298. The examiner can normally be reached on M-F 10:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kenneth A Parker
Primary Examiner
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